

# VMWA-2 - VMWARE VSPHERE: FAST TRACK [V8]

Categoria: VMware

## INFORMAZIONI SUL CORSO

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Durata: 5 Giorni

Categoria: VMware

Qualifica Istruttore: VMware Certified Instructor Dedicato a: Professionista IT Produttore: VMware

#### **OBIETTIVI**

By the end of the course, you should be able to meet the following objectives:

- -Install and configure ESXi hosts
- -Deploy and configure vCenter
- -Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
- -Configure vCenter High Availability
- -Create and configure virtual networks using vSphere standard switches and distributed switches
- -Create and configure datastores using storage technologies supported by vSphere
- -Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- -Configure and manage a VMware Tools Repository
- -Create content libraries for managing templates and deploying virtual machines
- -Manage virtual machine resource use
- -Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- -Create and configure a vSphere cluster that is enabled with vSphere High Availability and vSphere Distributed Resource Scheduler
- -Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date
- -Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- -Use host profiles to manage VMware ESXi host compliance
- -Monitor the vCenter, ESXi, and VMs performance in the vSphere client

#### **PREREQUISITI**

This course has the following prerequisites:

-System administration experience on Microsoft Windows or Linux operating systems

## **CONTENUTI**

## 1 Course Introduction

- -Introductions and course logistics
- -Course objectives

#### 2 vSphere and Virtualization Overview



- -Explain basic virtualization concepts
- -Describe how vSphere fits in the software-defined data center and the cloud infrastructure
- -Recognize the user interfaces for accessing vSphere
- -Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
- -Install an ESXi host

## 3 vCenter Management

- -Recognize ESXi hosts communication with vCenter
- -Deploy vCenter Server Appliance
- -Configure vCenter settings
- -Use the vSphere Client to add and manage license keys
- -Create and organize vCenter inventory objects
- -Recognize the rules for applying vCenter permissions
- -View vSphere tasks and events
- -Create a vCenter backup schedule
- Recognize the importance of vCenter High Availability
- -Explain how vCenter High Availability works

#### 4 Deploying Virtual Machines

- -Create and provision VMs
- -Explain the importance of VMware Tools
- -Identify the files that make up a VM
- -Recognize the components of a VM
- -Navigate the vSphere Client and examine VM settings and options
- -Modify VMs by dynamically increasing resources
- -Create VM templates and deploy VMs from them
- -Clone VMs
- -Create customization specifications for guest operating systems
- -Create local, published, and subscribed content libraries
- -Deploy VMs from content libraries
- -Manage multiple versions of VM templates in content libraries

## 5 Configure and Manage vSphere Networking

- -Configure and view standard switch configurations
- -Configure and view distributed switch configurations
- -Recognize the difference between standard switches and distributed switches
- -Explain how to set networking policies on standard and distributed switches

## 6 Configure and Manage vSphere Storage

- -Recognize vSphere storage technologies
- -Identify types of vSphere datastores
- -Describe Fibre Channel components and addressing
- -Describe iSCSI components and addressing
- Configure iSCSI storage on ESXi
- -Create and manage VMFS datastores
- -Configure and manage NFS datastores
- -Discuss vSphere support for NVMe and iSER technologies

### 7 Managing Virtual Machines



- -Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
- -Migrate VMs using vSphere vMotion
- -Describe the role of Enhanced vMotion Compatibility in migrations
- -Migrate VMs using vSphere Storage vMotion
- -Take a snapshot of a VM
- -Manage, consolidate, and delete snapshots
- -Describe CPU and memory concepts in relation to a virtualized environment
- -Describe how VMs compete for resources
- -Define CPU and memory shares, reservations, and limits
- -Recognize the role of a VMware Tools Repository
- -Configure a VMware Tools Repository
- -Recognize the backup and restore solution for VMs

#### 8 vSphere Monitoring

- -Monitor the key factors that can affect a virtual machine's performance
- -Describe the factors that influence vCenter performance
- -Use vCenter tools to monitor resource use
- -Create custom alarms in vCenter
- -Describe the benefits and capabilities of VMware Skyline
- -Recognize uses for Skyline Advisor Pro

## 9 Deploying and Configuring vSphere Cluster

- -Use Cluster Quickstart to enable vSphere cluster services and configure the cluster
- -View information about a vSphere cluster
- -Explain how vSphere DRS determines VM placement on hosts in the cluster
- -Recognize use cases for vSphere DRS settings
- -Monitor a vSphere DRS cluster
- -Describe how vSphere HA responds to different types of failures
- -Identify options for configuring network redundancy in a vSphere HA cluster
- -Recognize the use cases for various vSphere HA settings
- -Configure a cluster enabled for vSphere DRS and vSphere HA
- -Recognize when to use vSphere Fault Tolerance
- -Describe the function of the vCLS
- -Recognize operations that might disrupt the healthy functioning of vCLS VMs

#### 10 ESXi Operations

- -Use host profiles to manage ESXi configuration compliance
- -Recognize the benefits of using configuration profiles

# 11 Managing the vSphere Lifecycle

- -Generate vCenter interoperability reports
- -Recognize features of vSphere Lifecycle Manager
- -Describe ESXi images and image depots
- -Enable vSphere Lifecycle Manager in a vSphere cluster
- -Validate ESXi host compliance against a cluster image and remediate ESXi hosts using vSphere Lifecycle Manager
- -Describe vSphere Lifecycle Manager automatic recommendations



-Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

## 12 Network Operations

- -Configure and manage vSphere distributed switches
- -Describe how VMware vSphere Network I/O Control enhances performance
- -Define vSphere Distributed Services Engine
- -Describe the use cases and benefits of vSphere Distributed Services Engine

## 13 Storage Operations

- -Describe the architecture and requirements of vSAN configuration
- -Describe storage policy-based management
- -Recognize components in the vSphere Virtual Volumes architecture
- -Configure Storage I/O Control

#### **INFO**

**Esame:** 2V0-21.23 - VMware vSphere 8.x Professional --- VMware Certified Professional - Data Center Virtualization (VCP-DCV)

Materiale didattico: Materiale didattico ufficiale VMware in formato digitale Costo materiale didattico: incluso nel prezzo del corso a Calendario

Natura del corso: Operativo (previsti lab su PC)